

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
29 January 2004 (29.01.2004)

PCT

(10) International Publication Number  
**WO 2004/009298 A1.**

(51) International Patent Classification<sup>7</sup>: **B25D 9/02**, 9/04,  
E21B 1/24, 1/26, 1/30, 7/24

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(21) International Application Number:  
PCT/NZ2003/000158

(22) International Filing Date: 23 July 2003 (23.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
516798 24 July 2002 (24.07.2002) NZ

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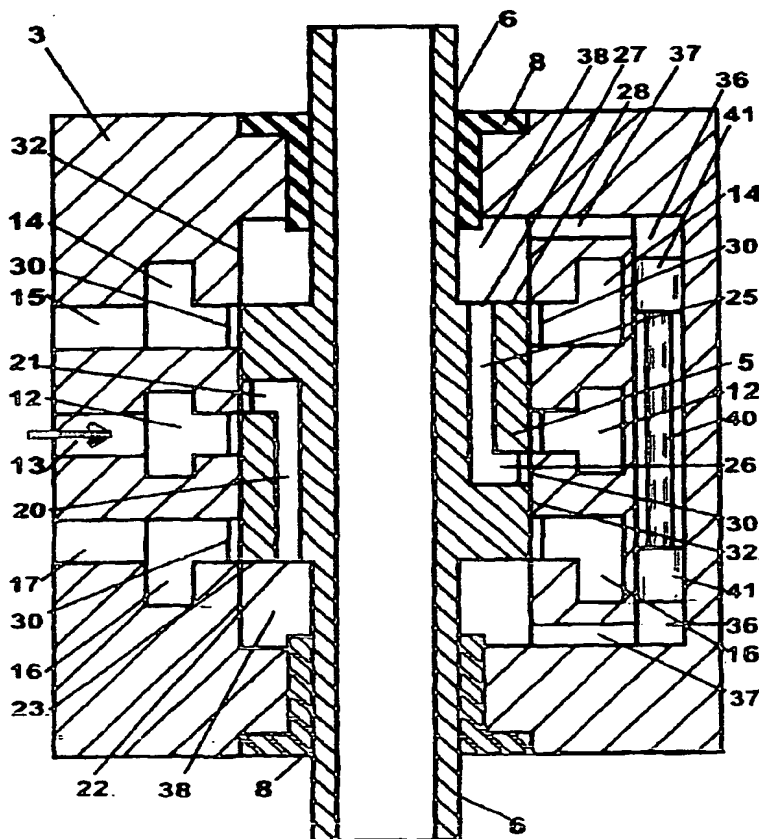
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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,  
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,  
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: SONIC DRILL



(57) Abstract: A sonic drilling apparatus having a work piston within a cylinder chamber to provide a vibratory force through the alternate application of fluid under pressure into the bore above and below the piston in a manner that the piston will be forced to reciprocate within the bore. The cylinder chamber includes an inlet gallery to allow fluid under pressure to pass into the bore above a first face of the work piston and an exhaust gallery to allow fluid to escape from the bore below the second face of the work piston. A relief bypass is provided to prevent excessive build up of pressure in the bore during the reciprocating movement of the work piston.

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